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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/831,179	05/04/2001	Bernhard Raaf	112740-205	1106
29177 7	7590 06/23/2004		EXAMINER	
BELL, BOYD & LLOYD, LLC			HOOSAIN, ALLAN	
P. O. BOX 1135 CHICAGO, IL 60690-1135		•	ART UNIT	PAPER NUMBER
,			2645	<b>V</b>
			DATE MAILED: 06/23/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
Office Action Summans	09/831,179	RAAF, BERNHARD			
Office Action Summary	Examiner	Art Unit			
	Allan Hoosain	2645			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on 04 Ju	<u>ıne 2004</u> .				
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This	☑ This action is <b>FINAL</b> . 2b) ☐ This action is non-final.				
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closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
<ul> <li>4)</li></ul>	vn from consideration.  /are objected to.				
Application Papers					
9) The specification is objected to by the Examine	r.				
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correcti	ion is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).			
11) ☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign  a) All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the prior  application from the International Bureau  * See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been receive (PCT Rule 17.2(a)).	on No ed in this National Stage			
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa				
S. Patent and Trademark Office					



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## FINAL DETAILED ACTION

# Allowable Subject Matter

1. Claims 20-21,23-25,27-28,30,32-33 and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 19,22,26,29,31,34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver, Jr. et al. (US 5,475,870) in view of Ozaki (US 5,933,465).

As to Claims 19,26,31, with respect to Figures 1 and 2A, Weaver, Jr. teaches a method for data transmission in a mobile radio system, the method comprising the steps of:

transmitting data between a first base station, 10, and at least one mobile station, 102, based on TDMA (a first transmission method);

inserting control of transmit power (interruption phases), at least during soft handoff (particular transmission phases), in which the mobile station interrupts the transmission of the data and in which the mobile station is switched to reception of power increase or decrease

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power transmission (data packets) sent by a second base station, 40, based on a system control commands (second transmission) method (Col. 9, lines 1-15),

Weaver, Jr. does not teach the following limitations:

"the second base station operating on a GSM standard which is based on a synchronization frame structure having a period of 51 frames; and inserting interruption phases having an effective total duration of a maximum of 10 observation frames"

Ozaki teaches a base station which transmits GSM based on 51 frames and where FCCH control signals (observation frames) are inserted every 10 frames (Col. 1, lines 56-67). Having the cited art at the time the invention was made, it would have been obvious to one of ordinary skill in the art to add GSM capability to Weaver, Jr.'s invention for controlling synchronization of received signals as taught by Ozaki's invention in order to provide mobile communications between base stations.

As to Claims 22,29,34, **Weaver**, **Jr**. teaches a method for data transmission in a mobile radio system as claimed in claim 29, wherein a period of 10 (nl GSM frames) lies between a start of a first FCCH interruption phase and a start of a second FCCH interruption phase, and a period of 10 (n2 GSM frames) lies between the start of the second FCCH interruption phase and a start of a third FCCH interruption phase (Col. 1, lines 56-67).

#### Response to Arguments

4. Applicant's arguments filed 6/4/04 have been fully considered but they are not persuasive because of the following:



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Examiner respectfully disagrees that Weaver does not disclose a second base station. In the 1/30/04 Office Action, Examiner identified a first and second base stations (Figure 2). Examiner also disagrees that it is not obvious to combine Weaver with Ozaki. This is because they are analogous art using TDMA in cellular systems and synchronizing base stations with mobile stations. Ozaki teaches how GSM modulation can be used in TDMA modulation systems so that synchronization can be achieved (Col. 1, lines 45-55). In particular, Ozaki teaches how synchronization is achieved using the FCCH control signal in TDMA and how it is achieved in GSM using the SCH channel in TDMA. The teaching suggests obviousness to one of ordinary skill for combining Ozaki with Weaver to achieve the claims.

#### Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Raaf (US 6,389,300) teaches synchronization in a GSM system using every ten time frames.

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any response to this final action should be mailed to:

#### Box AF

Commissioner of Patents and Trademarks Washington, D.C. 20231

## or faxed to:

(703) 872-9314, (for formal communications; please mark "EXPEDITED PROCEDURE")

Or:

(703) 306-0377 (for customer service assistance)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Allan Hoosain** whose telephone number is (703) 305-4012. The examiner can normally be reached on Monday to Friday from 8 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Fan Tsang**, can be reached on (703) 305-4895.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Allan Hoosain
Primary Examiner
6/17/04